## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2001-057526

(43) Date of publication of application: 27.02.2001

(51)Int.Cl.

HO4B 1/713

H04L 7/00

(21)Application number: 2000-121411

(71)Applicant: FUTABA CORP

(22) Date of filing:

21.04.2000

(72)Inventor: KONO RYUJI

**ISHII SATOSHI** 

HOSHIKUGI ATSUSHI

(30)Priority

Priority number: 11162747

Priority date: 09.06.1999

Priority country: JP

## (54) RECEIVER AND ESTIMATE METHOD FOR RECEPTION CHANNEL OF THE RECEIVER

## (57) Abstract:

PROBLEM TO BE SOLVED: To reduce a time required for establishing initial synchronization.

SOLUTION: In the case of setting a frequency of an output signal outputted from a PLL circuit 12 to a reception channel corresponding to a transmission channel of a transmission signal. a time constant changeover circuit 17 selects a time constant of a loop filter 14 for a low speed use time constant, sweeps the frequency between the highest frequency and the lowest frequency of the frequency channel so as to estimate the reception channel corresponding to the transmission channel from the signal received for the sweep period and establishes initial synchronization on the basis of the result of estimation. A plurality of reception antennas is used, they are switched in time division, and envelopes of signals received from the antennas are synthesized to surely estimate a reception channel where effect of multi-path fading is reduced.

